

ROUTE 360 CORRIDOR PLAN

Reformatted October 2006

**An Amendment To The Northern Area Land
Use and Transportation Plan, The Turner
Road Corridor Plan and Thoroughfare Plan**

**Adopted By The Chesterfield County
Board of Supervisors
May 10, 1995**

**Prepared By The Chesterfield County
Planning Department**

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EXECUTIVE SUMMARY

Contrasting development patterns and landscape views along the Route 360 Corridor, from Chippenham Parkway to Courthouse Road, are evidence of the changing face of Chesterfield County as it grows and matures. Although much of the County's recent development activity is occurring in new growth areas to the west, established areas such as this present important infill opportunities.

The initial challenge before the residents, land owners, business people and public officials

involved in the Route 360 Corridor planning effort has been to assess current trends, establish a joint vision of the area's future, and then carefully craft a comprehensive plan that identifies actions that can be taken to achieve long term vitality for the area as **"a quality, mixed use business corridor, uniquely sensitive to natural features and aesthetic appearance..."** Over the next twenty years, this plan will serve as a guide to all who will shape the area through future decisions and actions. It will also provide a foundation for a community partnership to begin working together to implement this vision.

Important issues addressed in the Route 360 Corridor planning effort include:

- Future demand for various business activities and housing types;
- Conversion of land to new uses and compatibility with surrounding neighborhoods;
- Ways to minimize traffic congestion and improve access for motorists and pedestrians; and
- Potential for aesthetic enhancements adaptable to developing and established areas.

Key recommendations of this plan are aimed at enhancing the vitality of the Corridor's business and residential settings by protecting the strong appeal of its neighborhoods, maintaining its market share of business activity, and achieving a unique visual image through special design techniques. Based upon a detailed economic analysis of market area trends and other important planning factors, the Plan strives to establish an efficient, compatible and attractive development pattern that meets future needs for additional housing, goods and services and jobs that are expected as a result of population growth in the market area. Specifically, the Plan:

New Corridor Center

- Promotes creation of a new, pedestrian oriented mixed use center at the northeast corner of the Hicks Road/Route 360 intersection that will establish a special focus for community life by centralizing primarily commercial services with space for outdoor events, a library, offices, office-warehouses, and under certain conditions, "cluster" or zero lot line type housing which would fill a growing demand by empty nester households and older residents of the community.

Protection of Visual Landscape Character

- Encourages protection of unique characteristics of the Corridor's visual landscape (such as forested views and rolling topography) so these important visual resources can be incorporated into future development.

Visual Improvements for Existing Commercial Areas

- Suggests opportunities to improve the attractiveness and market image of the Corridor's established business areas through coordinated landscaping efforts and other visual improvements.

Land Use Plan

- Provides for a range of commercial mixed use developments (community, neighborhood, and village-type) at prime locations within the identified corridor market area. Each site promotes efficient access and combines an appropriate scale of activities which may include retail, residential, offices, community facilities and office-warehouse uses.
- Maintains other areas for less intense future development that will be highly compatible with surrounding single family residential neighborhoods in terms of permitted uses and design character.

Transportation Plan

- Preserves the future traffic carrying capacity of Route 360 and supports planned land uses by recommending up to four new traffic signals and three new collector roads (to be built when new development takes place). A network of sidewalks and paths is recommended to provide for convenient pedestrian travel.

Water and Sewer Extensions

- Identifies utility extensions that will be necessary to enhance the Corridor's potential for infill development and suggests a method of financing such private sector incentives.

Implementation Partnership

- Supports formation of an implementation committee, representing varied private and public sector interests, to further define and

direct future implementation activities for the Corridor such as marketing, coordinated landscaping, etc.

INTRODUCTION

The diversity of the landscape along the Route 360 Corridor, from Chippenham Parkway to Courthouse Road, reflects the changing role that the roadway has played as Chesterfield County has grown and matured (see Map 1). Once dotted with family farms, the Corridor now provides secluded new subdivisions with convenient access to commercial services, regional highways and employment centers. Although much of the County's recent development activity is occurring in new growth areas to the west, established areas such as this present important infill opportunities and challenges that should not be overlooked.

Over the next twenty years, this comprehensive plan will serve as a guide to the public officials, land owners, business community and citizens who will shape the area through future decisions.

With a carefully crafted "blueprint" to the future, there will be increased potential for achieving long term vitality for the Corridor.

This plan is the product of a cooperative process, representing a sharing of varied perspectives and knowledge by the citizens and staff who participated. Rather than a one-time achievement, the plan more accurately represents a continuing process which requires periodic review and

assessment as new situations and opportunities occur.

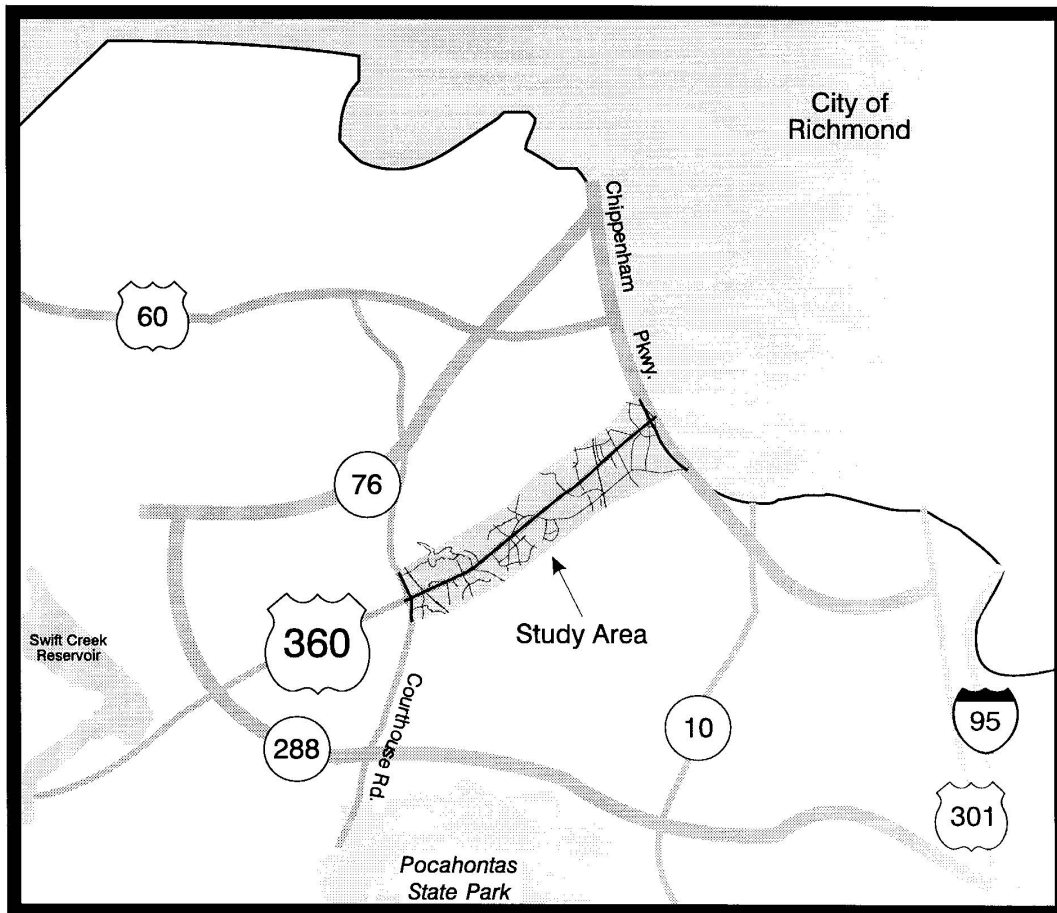
Together the various elements of the comprehensive plan present a unified vision

for the Route 360 Corridor and specific actions needed to enhance its potential as a special place for living and conducting business. Once adopted by the Board of Supervisors, the Route 360 Corridor Plan will replace corresponding parts of the Northern Area Plan which date to the mid-1980's.

Vision Statement

Expressions of what the community desires to become are reflected in the plan's vision statement. These ideas guided the plan's basic approach and content, and formed the basis for specific plan details and implementing recommendations presented in subsequent chapters:

Map 1
Vicinity Map
Route 360 Corridor



Not to scale



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A quality, mixed use business corridor, uniquely sensitive to natural features and aesthetic appearance, where long term vitality for prosperous commerce and surrounding neighborhoods is achieved in a continuing partnership between the residential and business communities and the County through effective strategies and actions.

Plan Contents

The Route 360 Corridor Plan is presented in two basic sections. The **Existing Conditions and Critical Issues** section summarizes background information on growth trends, environmental features and other planning factors presented originally in *The Route 360 Corridor Community Profile*. Another companion document to the plan is the *Route 360 Market Trends Study*, conducted for the Planning Department by The Chesapeake Group, a market research firm. This study provides a detailed account of economic factors which will affect future demand for various types of businesses, services and housing and estimates the timing of future needs for these types of activities. Findings from both of these studies were evaluated to determine prime locations for various types of land use activities and to identify appropriate techniques for shaping its eventual development. The *Visual Resources Inventory for the Route 360 Corridor* also provided valuable guidance in this regard.

Chapters found in the second section of the plan, titled **A Plan for Action**, illustrate important plan elements as follows:

- **The Goals:** include general statements characterizing the desirable future that the Plan is intended to achieve.
- **The Recommendations:** outline ways to achieve the goals and present related actions that should be taken to implement the Plan.
- **The Land Use Plan:** describes how, where and what types of development should occur during the next twenty years. A corresponding Public Facilities Plan indicates additional recommendations to support anticipated growth.
- **An Implementation Catalog:** presents suggested approaches for initiating Corridor marketing and design enhancements.

CITIZEN PARTICIPATION PROCESS

The Importance of Citizen Participation

The eventual effectiveness of a plan document is influenced by the extent to which it reflects the community's shared values and vision of the future. The challenge before the residents, land owners, business people and government officials involved in the Route 360 Corridor planning effort is to solidly establish a vision of the area's future and prepare a plan that effectively addresses current needs as well as future opportunities. By forging these common goals and priorities, the community can begin working together as a positive force to successfully achieve that vision.

Public Involvement

Prior to this planning effort, public involvement in Chesterfield County's planning process was focused primarily on zoning changes. Generally, this participation was in reaction to potential short term change at a specific location, rather than ongoing involvement in longer range planning for the future of a larger area. Therefore, it was decided that the citizen participation effort undertaken in conjunction with the preparation of the Route 360 Corridor Plan should maximize opportunities for establishing and maintaining constructive dialogue among the diverse groups interested in the future of the Corridor.

A series of 14 meetings were sponsored by the Planning Department to provide a forum for the public to share ideas and information and to provide input to County staff. At initial workshops, citizens identified problems and opportunities present in the community today.

A second series of meetings offered information on issues identified at the initial workshops and on other topics being studied as key planning factors. The Route 360 Corridor citizen participation program covered topics such as population and business trends, road improvement projects, environmental and visual resources, the Zoning Ordinance, County development standards, corridor design principles and characteristics of sustainable communities. One meeting took the format of a community discussion and provided an unstructured forum for participants to exchange their ideas about property ownership and citizen responsibilities.

The third group of meetings challenged citizens to

discuss and then put into words a description of the ideal Route 360 Corridor. The vision statement (presented earlier) weaves together various themes that reflect the community's shared thoughts about its desired future.

Another round of meetings gave citizens opportunities to provide feedback as a proposed land use plan and related recommendations were undergoing refinement. In addition, technical feedback was obtained from a focus group of development interests to identify special design techniques and workable approaches for implementing the recommended development pattern.

EXISTING CONDITIONS AND IMPORTANT ISSUES

Extensive analysis of existing conditions in the Route 360 Corridor, including valuable information generated through the citizen participation process, form the foundation for identifying key planning issues and factors. An understanding of the characteristics and trends that influence development potential in the area provides a sound basis for planning and policy decisions that will shape the Corridor's future. Companion documents to this plan, *The Route 360 Corridor Community Profile*, *The Route 360 Market Trends Study*, and *Visual Resources Inventory for the Route 360 Corridor*, provide detailed background information relating to existing conditions in the Corridor. The following key factors are highlighted from these reports.

Demographic and Economic Change

Detailed analysis of data from the U.S. Census, along with additional information provided in *The Route 360 Market Trends Study*, presents a useful profile of the area's population and economic trends. Although some of this data describes population trends in the larger Corridor market area (see Map 2), they are expected to influence the study area as well. A summary of projected growth trends can be found in Appendix A.

- **Population Growth:** Past growth in the area has been relatively similar to Countywide trends. By 1990, the number of households in the market area reached approximately 21,600. Assuming that the average annual growth rate remains relatively stable, between 11,500 and 15,000 new households could be added to the market area by 2010.

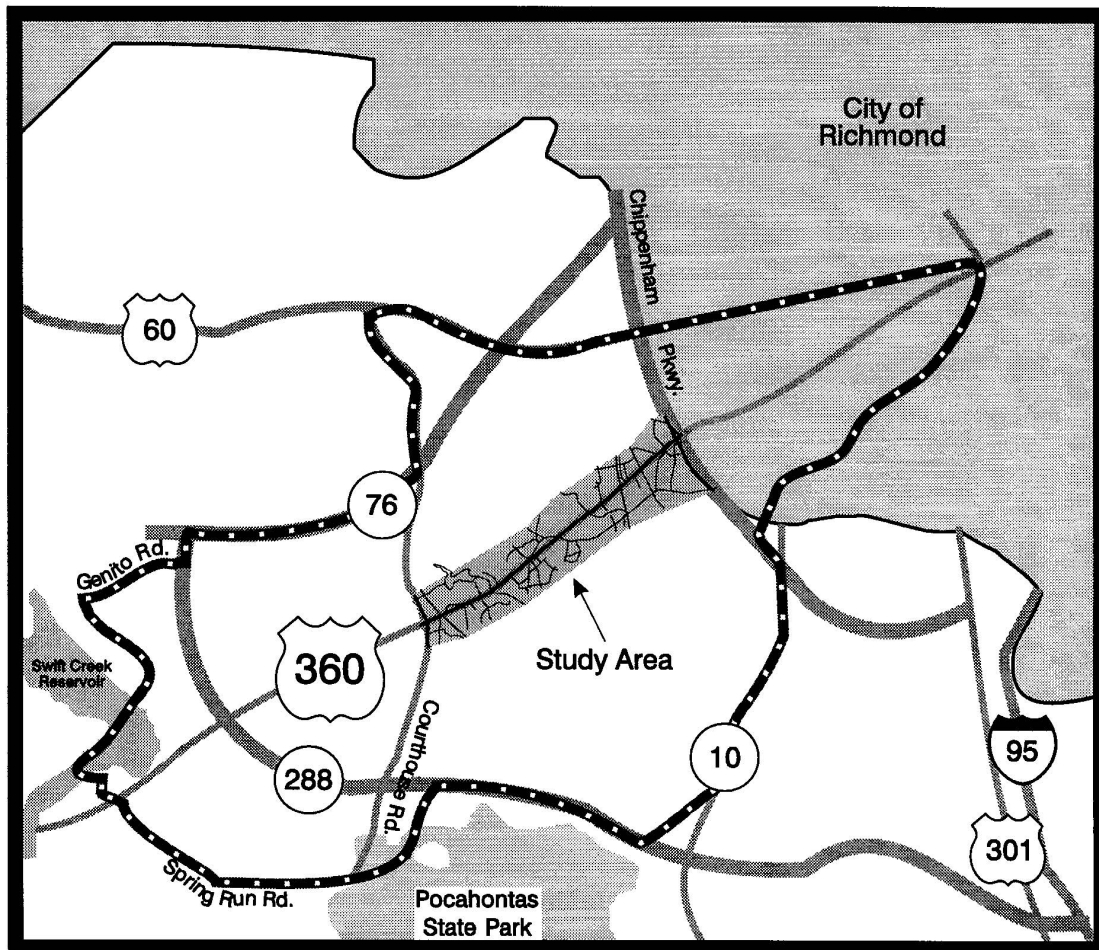
- **Age Groups:** Consistent with trends for the County, the area's 65 and older age group has been expanding since 1980. Between 1995 and 2000, the number of persons 65 and over is expected to peak. As their numbers increase, it is anticipated that many will wish to continue to live in the same area. As the current population ages, an increasing share of growth in the area is likely to come from younger County residents who wish to continue living in Chesterfield.
- **Income:** Average household income for the market area is expected to rise from \$46,460 in 1992 to \$55,770 in 2000. "Real" growth in household income (exceeding increases in inflation) will continue and is expected to reach \$74,200 by 2010. Household incomes have tended to be higher here than Countywide, reflecting higher education levels.
- **Employment:** Growth in the employment base, associated with new households and changes in existing households within the market area, is expected to add between 17,890 and 23,380 new workers by 2010. The service sector will continue to be the largest employment sector. Growth in the workforce will peak between 1995 and 2000, as a larger share of the population reaches retirement age.
- **Homeownership:** Although homeowners are clearly in the majority within the study area, renters comprise a slightly larger percentage (24 percent) than Countywide (21 percent), according to the U.S. Census. This reflects, in part, the availability of single family houses for rent in desirable neighborhoods.

Market Trends

Although continued population and employment growth are expected in the Route 360 Corridor market area, the share of overall market growth "captured" within the study area will be influenced by competition from elsewhere in the market area and in the County (see Map 2). However, the strong identity of its neighborhoods can be a unique asset in building market potential for quality business settings.

The following are highlights from *The Route 360 Market Trends Study* which estimates ranges of demand for new housing, additional retail, office and light industrial space, and overnight accommodations (also see Appendix A). Enhanced understanding of the

Map 2
Market Area Boundaries
Route 360 Corridor



Market Area ————

Not to scale



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market potential for these activities, along with other planning factors, can be useful as a guide in planning for the future vitality of the Corridor.

- **Housing:** It is estimated that between 1990 and 2010, approximately 11,500 to 15,000 new housing units will be needed in the market area. To respond to anticipated changes in the population (described earlier), the housing industry will likely seek to offer new housing types aimed particularly at the needs of senior citizens.
- **Commercial Services:** The study area presently contains approximately 650,000 square feet of space for retail and related services.

Market penetration levels are highest south of Route 360 (between Courthouse Road and Chippenham Parkway) where 69 percent of all households in that section currently shop or obtain services within the study area at least occasionally. However, penetration levels here are also the most vulnerable in the future as commercial services expand south of the Route 360 market area. By comparison, market penetration levels west of Courthouse Road and east of Chippenham Parkway are much lower (25 and 17 percent, respectively).

As with the southeast section, decreased penetration is also expected in the area west of Courthouse Road as competition increases from new and proposed commercial activity.

The study area is expected to capture approximately 25 percent of future market area demand for new retail space, which may add between 740,000 and 936,000 additional square feet (estimated to occupy between 90 and 120 acres). Opportunities exist to add unique elements to strengthen the Corridor's market niche - through creative physical form and special design features and the fostering of small, independent businesses.

- **Office:** It is estimated that the study area is likely to support an increase of between 199,000 and 254,000 square feet of office space by 2010, based on new household demand for professional services and planned office development elsewhere.
- **Light Industry:** "Flexible" space, adapted to research and development, office/warehouse or similar activities, is the type of light industrial space most likely to occur given current and future development in the study area. Depending upon the exact character of future business activity, it is estimated that "flex" space in the range of 70,000 to 331,000

square feet could be supported in the study area. This estimate may be exceeded to the extent new "flex" space is occupied by retail and office/service activities.

- **Overnight Accommodations:** Additional transient accommodations within the study area are not expected to be marketable given the current supply of 1,050 rooms at nearby facilities, present occupancy rates below the desired 70 percent industry standard, and lack of direct access to an interstate highway or a major employment center. Lacking significant demand for guest rooms, it is unlikely that new meeting facilities or other similar uses would be able to generate sufficient revenue to make such businesses viable.

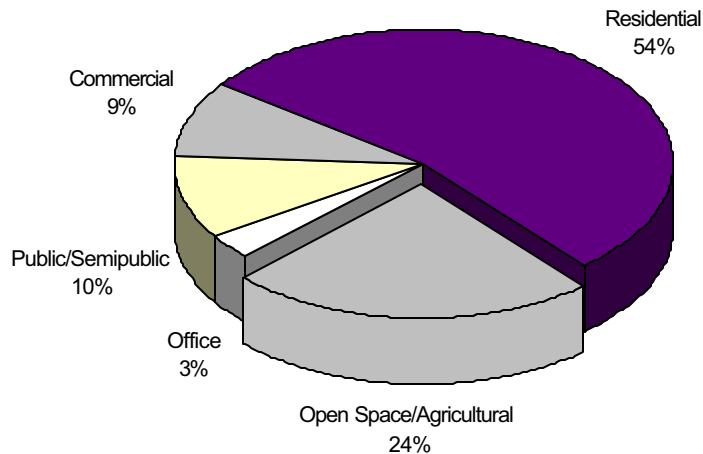
Land Use

The Route 360 Corridor Study Area consists of approximately 1,800 acres of land stretching along more than four miles of primary highway between Chippenham Parkway and Courthouse Road.

As illustrated on the existing land use map (see Map 3), much of the western part of the study area remains open space, apparently bypassed by development activity now occurring further west. The result is a sizable gap in the Route 360 growth pattern between Pocoshock Boulevard and Oxbridge Road. This situation presents an ongoing opportunity - to effectively respond to economic trends in the Corridor market area and to the demand for specific land uses.

- **Land Availability:** Approximately 76 percent of the land in the study area is developed, leaving 24 percent (over 400 acres) currently undeveloped. Opportunities for future redevelopment of under-used sites are found primarily in the eastern end of the study area where close proximity to regional highway access and older, less functional development patterns may stimulate change.
- **Variety:** Development of the Route 360 Corridor, having taken place over several decades, has resulted in a mix of land uses including residential, commercial, office, public and open space (see Chart 1).

**CHART 1:
LAND USE IN THE ROUTE 360 CORRIDOR STUDY AREA**



Source: Chesterfield County Planning Department, 1993

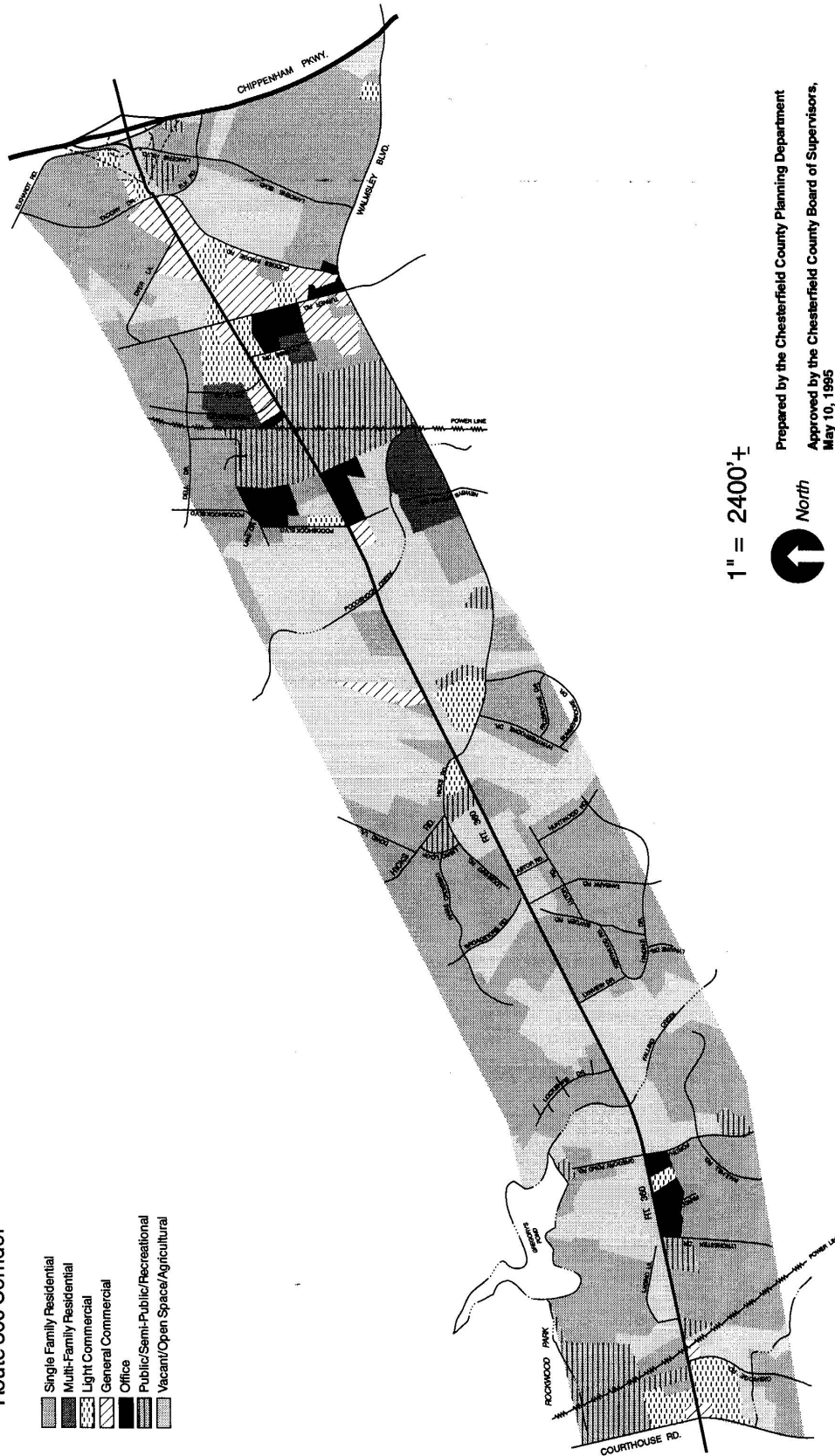
- Residential Development:** Residential development accounts for approximately 980 acres or 52 percent of the total acreage in the study area. Newer single family housing, built mostly since the 1960's, is located in subdivisions secluded from Route 360.
- Compatibility:** Nearby growth and its associated impacts raise two important issues of land use compatibility. Increases in traffic volumes and necessary road widening projects in the Corridor have impacted the quality of life for those whose homes face Route 360. As land is marketed for development, other compatibility issues often arise from surrounding neighborhoods concerning the potential impacts of proposed business uses to be located near their subdivisions.
- Rezoning Trends:** Zoning activity in the Corridor has remained fairly static over the past several years due in part to recent economic conditions. Since 1987, four of the ten rezoning requests submitted for property along Route 360 west of Pocoshock Boulevard were approved for relatively low intensity uses with numerous conditions. The other cases were denied or withdrawn.
- Zoning Issues:** Despite strong community interest in zoning related topics, a general lack of understanding exists about the impacts of the County's development requirements and about property zoning as a factor in tax assessment practices. Despite the widely divided views of property owners and neighborhood groups over recent rezoning cases, both sides agree the degree of debate may be dampening developers' interest in potential projects in the study area. Public discussion will likely continue to focus on land use compatibility issues and the quality of project development features.
- Current Pattern:** Zoning in the Corridor represents a diverse mix of commercial, residential, office, light industrial and agricultural districts. Most of the parcels fronting Route 360 east of Pocoshock

Zoning

Zoning, the process regulating land use and development activities, has become a major issue in the Route 360 Corridor during the past decade. Zoning patterns are heavily influenced by the land use plan which acts as a guide or blueprint for development. The zoning process can precede development activity by many years and influence the valuation of land by increasing its economic potential.

Map 3
Existing Land Use
Route 360 Corridor

- Single Family Residential
- Multi-Family Residential
- Light Commercial
- General Commercial
- Office
- Public/Semi-Public/Recreational
- Vacant/Open Space/Agricultural



1" = 2400'±



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Transportation

Route 360 functions as a major east/west arterial, and plays a critical role in carrying traffic through Chesterfield County and the region. Land use planning and access control in the Corridor should have as a primary goal the preservation of the traffic carrying capability of the road. The following information describes Route 360 from Courthouse Road to Chippenham Parkway.

- **Importance:** Route 360 is identified on the County's Thoroughfare Plan as a Major Arterial with a recommended right-of-way width of 120 to 200 feet. The Virginia Department of Transportation (VDOT) classifies Route 360 as a Principal Arterial highway.
- **Regional Truck Route:** Through the Surface Transportation Assistance Act (STAA) of 1982, the Commonwealth Transportation Board designated Route 360 as a regional route for over-sized and tandem-trailer trucks. Around 10 percent of the traffic on Route 360 between Courthouse Road and Chippenham Parkway consists of tractor trailer and tandem-trailer trucks.
- **Traffic Volumes:** Traffic data provided by VDOT for 1992 indicates that this section of Route 360 is carrying approximately 40,000 vehicles a day. Congestion occurs primarily during the morning and afternoon peaks at signalized intersections.
- **Widening Improvements:** In order to improve the capacity of the existing four-lanes and accommodate current and projected traffic volumes, VDOT prepared a design for widening Route 360 to eight lanes. A lack of highway funds for construction resulted in a scaling back of the project.

Route 360 is currently being widened from four to six-lanes between Turner Road and Hicks Road/Walmsley Boulevard and from Courthouse Road to Genito Road. The section of Route 360 between Hicks Road/Walmsley Boulevard and Courthouse Road is scheduled for widening to six-lanes, with construction beginning in 1996.

The cost of these improvements is estimated at approximately \$32 million, a major investment of public funds. If future congestion and additional widening are to be minimized, development densities, access locations and the number of signalized intersections should be controlled.

- **Signalized Intersections:** Seven signalized intersections are currently found on this section of the Route 360 Corridor at 1) Courthouse Road, 2) Walmsley Boulevard/Hicks Road, 3) Pocoshock Boulevard, 4) Manchester Middle School, 5) Turner Road, 6) Tacony Drive/Goodes Bridge Road, and 7) Chippenham Parkway southbound on/off ramps. An actuated signal provides emergency access to the Manchester Fire and Rescue Station.

Although no funds are available, it is anticipated that the Chippenham/Route 360 interchange should eventually be reconstructed to provide a full cloverleaf design, eliminating the signal at this location.

- **Other Projects:** Other road projects in the area include: 1) the widening of Courthouse Road to four lanes north of Route 360 (under construction); 2) the widening of Chippenham Parkway to six lanes (construction scheduled for 1997/98); and 3) the widening of Courthouse Road to four lanes south of Route 360 (construction scheduled for 1997).
- **Pedestrian Travel:** Some pedestrian foot paths are evident, particularly between Chippenham Parkway and Pocoshock Boulevard. The current lack of sidewalks within the Corridor and other factors have discouraged pedestrian travel.

Public Facilities and Services

An array of public facilities and services are provided within the Route 360 Corridor including: public water and sewer, library services, parks, public schools, and emergency services. Quality of life factors such as these are important in assessing the relative potential of an area to serve the changing needs of citizens and to attract new development.

- **Public Utilities:** Although major public water and sewer lines serve the study area, there are some locations where extension of existing systems will be costly due to lengthy distances and/or the need to upgrade capacities of existing lines (see detailed analysis of County utilities systems found in Appendix B). The exact extent of the cost can only be determined by site specific analysis.
- **Library Services:** Ranking third highest in circulation level among branch libraries, the LaPrade Branch Library should be at least twice its current size to adequately serve existing and future patrons.
- **Parks:** Two County park facilities are located

in the Corridor study area, providing extensive active and passive recreation opportunities. A greenway system of walking trails has been initiated along Falling Creek at Fernbrook Park.

- **Public Schools:** Overcrowding continues to be a problem at Jacobs Road and Davis Elementary Schools. Enrollments at Chalkley and Providence Elementary Schools and Manchester High School are at or near capacity. Monacan High School will be relieved in Fall 1994 when James River High School opens. Enrollment at Providence and Manchester Middle Schools are well below capacity due to the opening of two new middle schools in recent years.

Environment

The Route 360 Corridor study area is characterized by significant physical attributes including major water features, wooded areas and rolling topography. The general locations of wooded areas, floodplains and related streams and water bodies are shown on a Summary Analysis Map (included in the separate *Design Guidelines* document). It is important to consider the environmental impacts which may be caused by development in order to safeguard these natural resources, key visual attributes as well as the quality of life for citizens.

- **Significant Features:** The area west of Hicks Road contains distinctive physical attributes including rolling hills, stream valleys and contiguous wooded areas which could become valuable site amenities of future development.
- **Environmental Protection:** County regulation of activities within floodplains and Resource Protection Areas (wetlands and vegetated conservation areas around a stream), including Falling Creek, Pocoshock Creek, and Horner's Run, results in comprehensive protection for property owners, water supplies and wildlife.

Water Quality: The importance of water quality issues in the Corridor is heightened due to the extent of water features present, their proximity to established neighborhoods and drainage patterns that eventually lead stormwater to the James..

Visual Resources

The Route 360 Corridor study area contains a diversity of visual attributes and opportunities both

in its developed and undeveloped areas.

The quality of the visual environment is important in maintaining attractive and functional settings for residences and businesses and in creating an overall positive impression. Key visual resources and viewpoints are described in the separate *Visual Resources Inventory for the Route 360 Corridor Study*. Significant view opportunities including visually prominent sites in undeveloped areas are highlighted on the Summary Analysis Map (presented in the separate *Design Guidelines* document).



Key visual resources and viewpoints along the Corridor present important opportunities for integrating significant natural site features into new development.

- **Natural Environment:** The diversity of view features along the Corridor and the presence of five visually prominent sites located west of Pocoshock Creek create important opportunities and challenges to effectively integrate these significant natural site features into new development.
- **Development Patterns:** An evaluation of visual and functional differences, comparing the older commercial "strip" pattern east of Manchester Middle School with newer business development elsewhere, indicates opportunities exist for design and aesthetic enhancements to the current development pattern.

A PLAN FOR ACTION

As the 21st century approaches, the vision statement for the Route 360 Corridor will provide a clear picture of what the community desires to become. Contained here are the key action elements of the Route 360 Corridor Plan. Overall goals are followed by general recommendations, a detailed land use plan, and an implementation

catalog that will act as a resource to the community in guiding the future of the area.

Goals

The goals listed below help to form a foundation for the future of the Route 360 Corridor. Through these goals, a general framework is established for the plan's more specific recommendations. These goals, like the recommendations that follow, are not in order of rank or priority.

1. Maintain the long term vitality and attractiveness of the Route 360 Corridor as a quality, mixed use environment
 - a) Promote an efficient and compatible land use pattern that establishes a community focal point in the Corridor.
 - b) Strengthen aesthetic quality and a sense of identity for the community through development tools that foster harmonious site planning, architectural and landscape design for new development, and encourage aesthetic improvements at existing business locations.
 - c) Maintain the diverse visual character of the natural landscape by encouraging protection of sensitive and unique environmental features and views of special significance, and integrating them as key amenities of future development.
 - d) Provide for a diversity of innovative housing types (targeted predominantly to ownership market) including creative designs that are responsive to changing population needs and compatible with surrounding neighborhoods.
2. Enhance the potential for prosperous commerce
 - a) Provide for necessary commercial and public services to meet future population needs and protect prime sites from inappropriate development.
 - b) Insure that the level and type of business uses are compatible with the scale and character of established neighborhoods and other adjacent land uses.
 - c) Develop a business and residential community partnership in the Corridor to carry out a comprehensive implementation strategy and undertake marketing

efforts.

3. Enhance public facilities and services to maintain a high quality of life and to encourage infill development
 - a) Support enhancements, as necessary, to existing utility systems and leisure facilities.
 - b) Promote safe pedestrian access to commercial and public services and natural amenity areas from nearby neighborhoods and employment centers.
4. Provide a safe, efficient, and cost effective transportation system
 - a) Ensure proposed land uses and densities along the Corridor are controlled so that the smooth flow of traffic on Route 360 is not disrupted.
 - b) Limit the number and properly locate direct access to Route 360 and connecting streets, minimizing the number of new signalized intersections along the Corridor.
 - c) Construct additional collector/local roads as development occurs to help relieve the increase in traffic generated by growth in the Corridor.
 - d) Encourage pedestrian activity.

Recommendations

Planning is a continuous process. The effectiveness of the Route 360 Corridor Plan will be measured by the extent to which its recommendations are translated into reality.

The recommendations presented below call for specific and carefully coordinated actions to carry out the Route 360 Corridor Plan. It is these recommendations, plus guidance provided by the accompanying land use and public facilities plans, that will be useful to the local officials, citizens and the business community who will jointly chart the course of the Corridor's future. An implementation catalog, included in a later section, identifies approaches for initiating key recommendations regarding business development and Corridor design guidelines.

A. Land Use

1. **Balance:** Provide for a mix of land uses that

encourages continued growth that is orderly and cost-effective for the County, and is responsive to Corridor market area needs for appropriate commercial and public services and jobs located near where people live.

2. **Pattern:** Promote long term vitality for Corridor business and neighborhood settings by clustering an optimal mix of commercial services at key locations that will act in a synergistic manner, and become complimentary focal points enhancing the neighborhood life of surrounding residential areas.
3. **Corridor Focus:** Adopt a detailed plan for the large, undeveloped parcels at the Route 360/Hicks Road intersection to establish a special new community identity. Give initial priority to coordinating efforts that will create this pedestrian oriented, mixed use center as a high quality, uniquely designed focus for complimentary activities such as shopping and services, leisure activities, a library, multi-unit and/or senior citizen housing, medical offices, and office/warehouses.
4. **Chippenham Interchange Area:** Encourage planned development of a new location for light industrial uses (with access to Route 360 and Goodes Bridge Road) that will strengthen the visual image of the existing business corridor and help to stimulate future infill and redevelopment opportunities.
5. **Development Compatibility:** Consider the compatibility of currently zoned land with planned land uses and provide technical assistance to property owners to achieve the community's vision without compromising existing or future development.
6. **Residential Development:** Amend the County's Zoning Ordinance by updating the residential districts to include innovative new housing types and design techniques that creatively accommodate densities thus providing the necessary critical mass to maintain open space and/or incorporate special amenity features.
7. **Land Use Assessment:** Encourage property owners meeting program eligibility requirements to seek open space classification. This category extends tax benefits to properties not meeting farming or timbering requirements and would encourage significant natural amenities to be preserved as future development occurs consistent with the Plan.

B. Business Development

1. **Market Niche:** Strengthen the potential of the study area to maintain its market share by refining its niche for convenience goods and related services. Encourage new development that has unique physical form and quality design features and enhances prospects for small, independent businesses with special appeal.
2. **Timing:** Focus initial efforts to stimulate new retail development at the proposed community mixed use center designated at the northeast corner of the Hicks Road/ Walm-sley Boulevard intersection.
3. **Marketing:** Explore forming a partnership to undertake small business development activities that will implement the Plan's recommended options for business retention and recruitment.

C. Visual Resources/Design

1. **Design Guidelines:** Adopt special design guidelines that can be implemented during the rezoning and site plan review processes to: protect unique characteristics of the visual landscape (especially those contributing to key visual points), and establish within each of the Corridor's distinct visual zones consistent elements of visual appearance that will enhance existing high quality developments.
2. **Established Commercial Zones:** Work initially to implement concepts outlined in the Design Guidelines aimed at improving the appearance of the urban landscape within the east and west entrances to the Corridor (identified as Established Commercial Area Zones). Consistency of visual appearance between developed areas and infill sites should be addressed by establishing unifying features including street trees, green spaces, signs and building facade improvements. A public/private partnership should initiate implementation of this streetscape improvement project in the area east of Manchester Middle School.
3. **Greenways:** Develop and implement a pedestrian system in accord with the proposed County Greenways Plan to link key locations by supporting greenways on public and private land and by encouraging use of conservation easements by landowners and developers.
4. **Tree Cover:** Continue to protect large canopy trees at key locations that enhance buffers adjacent to residential areas, frontage views of undeveloped property along the Corridor, stream valleys formed by Po-

coshock and Falling Creeks, and that define significant spaces by providing a backdrop for existing and new buildings.

D. Environment

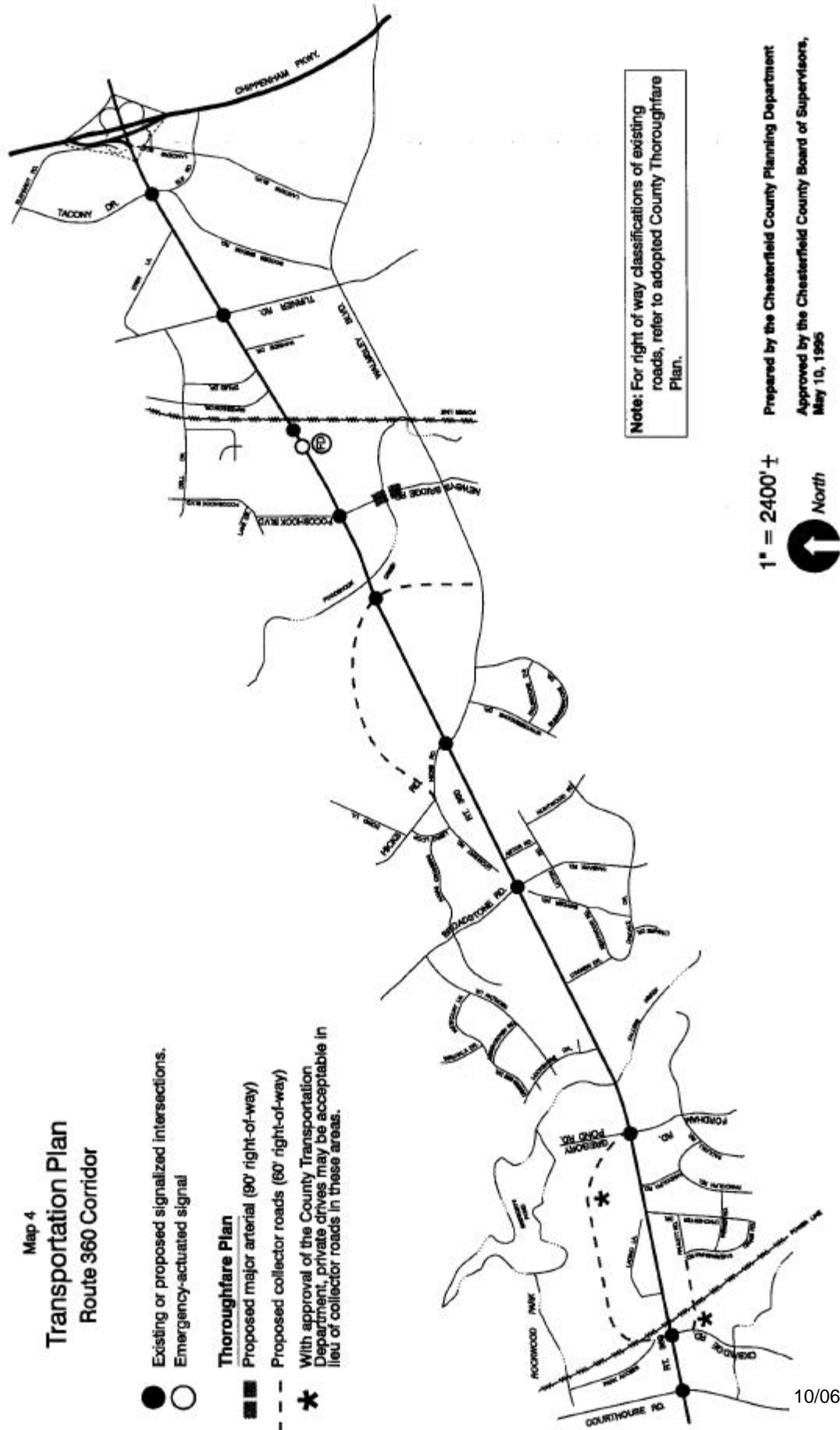
1. **Water Quality Protection:** Continue to carry out the goals, policies and implementation strategies to protect the water resources in the Route 360 Corridor in accordance with the County's Water Quality Protection Plan and the Chesapeake Bay Preservation Act.

E. Transportation

1. **Signalized Intersections:** Provide no more than four new traffic signals, if warranted, along the Corridor as shown on Map 4. Three of these signals are proposed at existing intersections including: Oxbridge Road, Gregory Pond Road/Fordham Road, and Tanbark Road/Broadstone Road. The fourth signal should provide access to large undeveloped areas north and south of Route 360 just west of Pocoshock Creek. The difference in elevation between the eastbound and westbound lanes should be considered before access can be permitted. The cost of these improvements is estimated at approximately \$500,000. Without these improvements, the permitted densities and land uses for the adjacent properties should be limited.
2. **Cross-overs:** Close cross-overs on Route 360 that are not recommended for signalization, except at Lynchester Drive and at the Cross Pointe Shopping Center. The Lynchester Drive and Cross Point Shopping Center crossovers are not recommended for traffic signalization. It is recommended that closing of these two crossovers not occur until alternative access to a signalized intersection is provided for existing developments that are served by these crossovers. Unsignalized cross-overs on highways with six or more lanes generally do not function safely, due in part to the time required to cross multiple lanes against oncoming traffic, the stacking of vehicles in cross-overs waiting for breaks in the traffic stream, and the blocking of sight distance by oncoming traffic. Development proposals adjacent to crossovers that are not recommended for signalization should provide for their removal.
3. **Right-In/Right-Out Access:** Limit direct access to Route 360 between the proposed signalized intersections (listed in E1 above) to right-in/right-out only. Adequate turn lanes and an access separation of approximately 500 feet should be required. Developments should be required to share right-in/right-out access with adjacent properties to control the number of access locations.

4. **Thoroughfare Plan:** Provide an additional connection between Walmsley Boulevard and Route 360 (see Map 4). The County's adopted Thoroughfare Plan identifies a connection south of Route 360 across Pocoshock Creek between Pocoshock Boulevard and Newbys Bridge Road. This road is identified on the Thoroughfare Plan as a major arterial with a recommended right-of-way width of 90'. This link should relieve traffic congestion on Turner Road to the east. The estimated cost of construction is \$600,000. This connection would likely be funded as a public project, and should be included in the County's Capital Improvement Program (CIP).
5. **Collector Roads:** Require the following new roads through undeveloped areas to provide existing and future development with access to signalized intersections, and to accommodate travel between adjacent areas along the Corridor without requiring the use of Route 360 (see Map 4):
 - a) South of Route 360 from Walmsley Boulevard to a new intersection on Route 360 west of Pocoshock Creek;
 - b) North of Route 360 from the new intersection west of Pocoshock Creek

Map 4
Transportation Plan
Route 360 Corridor



to Hicks Road opposite Lockhardt Road;

- c) South of Route 360 from Lynchester Drive and Oxbridge Road;
- d) North of Route 360 connecting the Oxbridge Road and Gregory Pond Road/Fordham Road intersections.

In areas a and b above, these roads represent a new functional classification of Thoroughfare Plan Collector, with a recommended right-of-way width of 60 feet. Setbacks from these Collectors could be reduced if safe ingress and egress to adjacent property is provided. Development proposals in these areas should include the dedication of right-of-way and construction of any section of these Collectors that are located within their property boundaries.

In areas c and d above, these roads should also be 60 foot wide Collectors, as described above. Properly designed private drives with appropriate access easements through some commercial developments could serve the same function as a collector. The use of private drives in these areas must be approved by the County Transportation Department. Development proposals in areas c and d should include the dedication of right-of-way and/or the recordation of access easements, and the construction of any section of these roads that are located within their property boundaries.

1. **Pedestrian Access:** Encourage pedestrian activity by developing a network of sidewalks and other paths that provide convenient pedestrian travel between adjacent land uses.

The Virginia Department of Transportation has specific criteria for determining whether sidewalks qualify for State maintenance. The criteria generally state that sidewalks will qualify for public maintenance on roads that carry traffic volumes exceeding 1,000 vehicles per day, and that are located 1) within one mile of an elementary school, or 2) one and one half miles of an intermediate or high school, public park or library, or 3) within 1,000 feet of commercial property.

In areas where sidewalks are provided and the VDOT criteria are not met, the County should determine that sufficient funds for maintenance and repair are provided. In commercial areas, maintenance should be the responsibility of the developer/property owner. Sidewalk maintenance in residential areas could be funded through annual as-

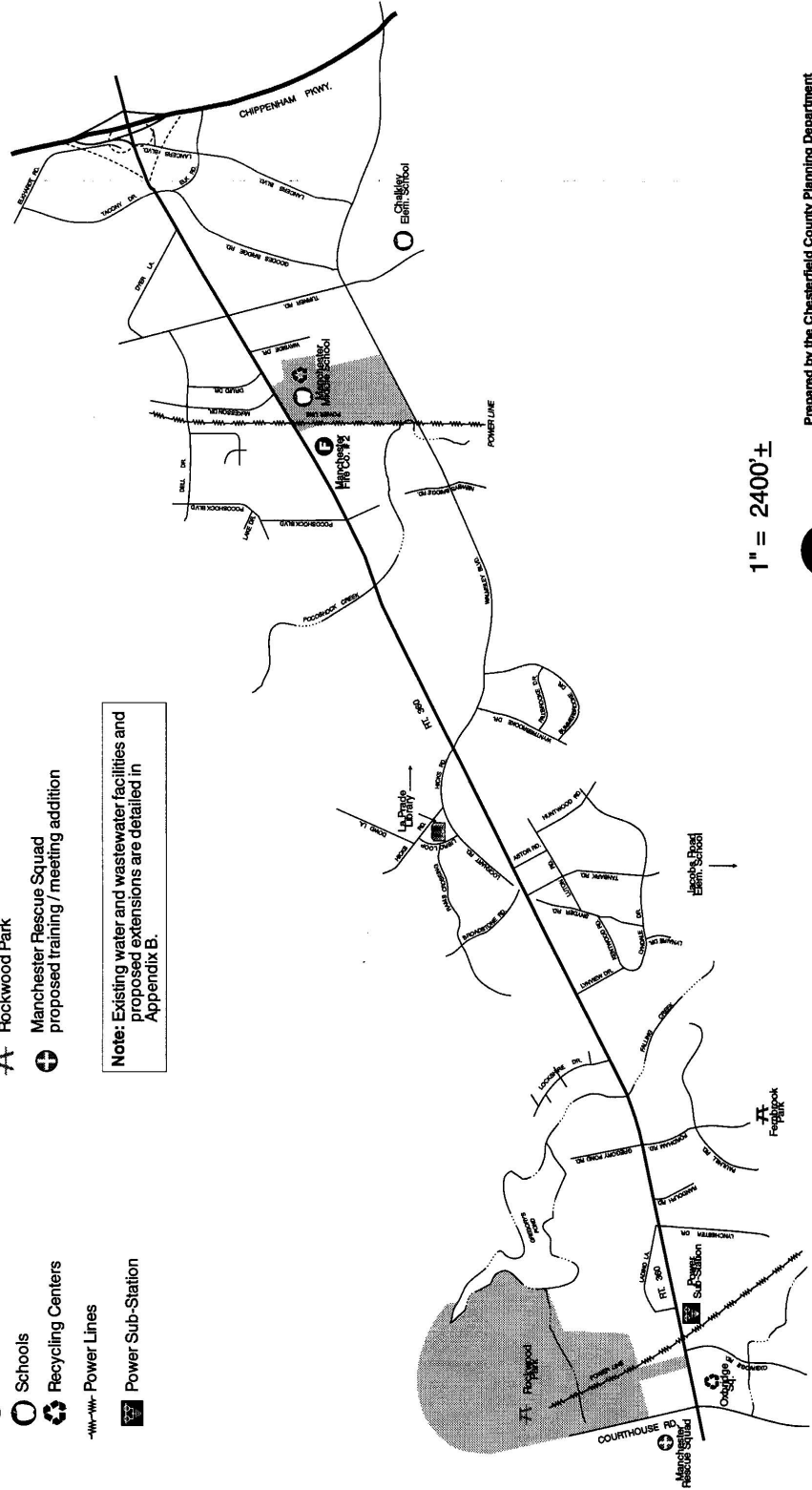
sessments, escrow accounts, or other private means.

F. **Public Facilities and Services**

1. **Capital Improvement Program:** Use the Public Facilities Plan for the Route 360 Corridor (Map 5) or, upon its adoption, the County's proposed Public Facilities Plan, as the primary guide for initiating future public facilities projects in the County's Capital Improvement Program.
2. **Water and Sewer:** Facilitate off-site utility extensions where required to serve undeveloped property in the Corridor, thus enhancing potential for infill development. (A detailed analysis and mapping are included in Appendix B). When efforts to stimulate private partnerships for this purpose prove infeasible, the County should create new assessment districts funded by the Capital Improvement Program to provide "up-front" costs of needed utility extensions, enabling property owners to refund these costs to the County within a ten year period.
3. **Library Services:** Support efforts to relocate the LaPrade Branch Library to a nearby site within the proposed community mixed use center at Hicks Road.
4. **Parks:** Expand recreation opportunities at existing Rockwood Park by adding recreational facilities consistent with the adopted Parks and Recreation Master Plan.
5. **Greenways:** Pursue options to establish greenway links along Falling Creek (between Fernbrook Park and Rockwood Park) and along Pocoshock Creek (between Manchester Middle School and nearby community facilities) through use of public easements (i.e., power line right of way) or conservation easements in cooperation with interested landowners.
6. **Public Safety:** Program CIP funds for a new fire/rescue station in the vicinity of Courthouse Road and Genito Road to address the present void in coverage and to enhance response times within the area from Courthouse Road east to Falling Creek. Also, support the Manchester Rescue Squad in its short term efforts to add a training room to improve squad emergency preparation and provide a meeting place for community non-profit organizations.

Map 5
Public Facilities Plan
Route 360 Corridor

- | | |
|--|---|
| Existing Facilities | Expanded Facilities |
| <ul style="list-style-type: none"> Fernbrook Park Manchester Fire Co. #2 Schools Recycling Centers Power Lines Power Sub-Station | <ul style="list-style-type: none"> LaPrade Library proposed expansion or re-location Rockwood Park Manchester Rescue Squad proposed training / meeting addition |
- Note: Existing water and wastewater facilities and proposed extensions are detailed in Appendix B.

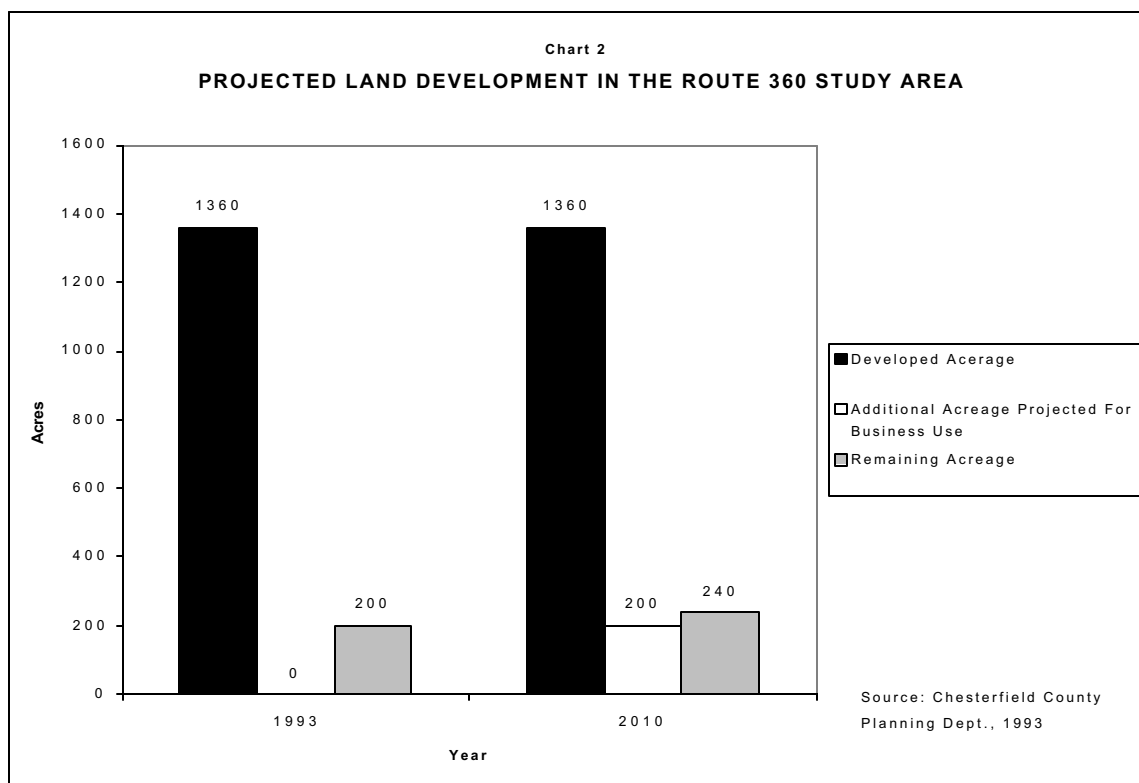


Prepared by the Chesterfield County Planning Department
Approved by the Chesterfield County Board of Supervisors,
May 10, 1995

G. Plan Implementation

1. **Coordination:** Expand coordination among County departments through integrated programs and policies as implementation of the Route 360 Corridor Plan occurs.
1. **Public Involvement:** Continue to rely upon existing organizations in the Route 360 Corridor as a primary resource to help carry out the recommendations of this plan. Work with interested citizens, property owners, and business people to form an implementation committee to further define and direct implementation activities, perhaps leading to establishment of a permanent entity.

- Establish an efficient and compatible development pattern that encourages an appropriate mix of land uses including residential, office, commercial and light industrial uses.
- Enhance the long term vitality of the Corridor by reinforcing its unique features and visual quality.
- Create a new mixed use center that establishes a special sense of place for community life.
- Fully utilize public facilities investments by encouraging infill development.

**The Land Use Plan**

The Land Use Plan seeks to enhance the special character of the Route 360 Corridor and to help guide the changes in the development pattern that will take place over the next twenty years. The plan strives to:

- Promote a balance of business and residential development so that necessary services and jobs are available to serve the needs of a growing population.

- Identify opportunities for future redevelopment of under used properties.

As indicated in Chart 2, it is estimated that up to 200 acres of additional land in the study area should be reserved for a mixture of commercial, office and light industrial uses based on future population and market growth trends. Planning for such changes, rather than reacting to them, involves translating community goals into recommendations that address the details of converting land to new uses.

The Land Use Plan illustrates the recommended future development pattern for the Route 360 Corridor. It provides more than an

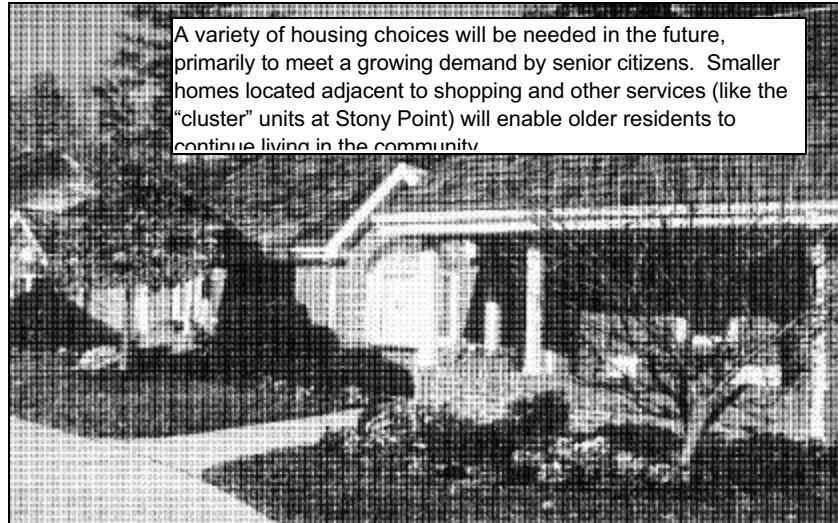
adequate supply of additional acreage for various land uses relative to market demand projections (see Land Use Comparison table, Appendix C). This map will be useful as a guide for all future decisions, including rezonings and other regulatory land use decisions. Key features of the plan, including details of recommended uses, are presented in Chart 3.

This growth pattern recognizes the strong appeal of the residential amenities found in neighborhoods surrounding the Corridor and the need for additional housing, goods and services resulting from population growth in the market area. Building upon these strengths, the plan seeks to promote a range of mixed use developments, with new retail sites concentrated at suitable intersections that can provide efficient access and contribute to the desirability of nearby neighborhoods, and thus to the long term vitality of the Corridor. Recommended design guidelines for new development (accompanying this Plan) are aimed at achieving special market image for the Corridor reinforcing the area's high quality visual features.

Infill development in the Route 360 Corridor will take place over the next 20 years or more. The pace of growth will be incremental, especially with respect to commercial development which tends to lag behind residential growth. An overriding influence will be the restricted share of market demand for commercial space that the study area is expected to capture. Another factor that may play a role in future business location decisions are variations in acquisition and development costs of individual sites, which in the past have acted to scatter business activity versus building business synergy and long term stability. These market realities suggest the need importance of weighing priorities within the Corridor regarding how commercial development should occur in order to strengthen its market niche. Thus, developers should see a benefit to developing the northeast corner of the Hicks/Walmsley intersection developed first. Prime assets of this large site include its central "crossroads" location, accessibility from major roads, amount and arrangement of developable acreage, and visual significance.

Activities planned for this community mixed use center are directed at capturing feasible and appropriate opportunities in the market area, primarily for retail and commercial services, entertainment and leisure activities, and for offices and flexible office-warehouse space. Although

multi-family or townhouse residential uses are not recommended at this center, the Plan could support lower density housing opportunities such as "cluster" homes. Such housing types could fill a growing demand by empty nester households and older residents who want to stay in the community. Senior citizens are expected to comprise the majority of demand for smaller units built after 1995 (see photo).



The Route 360 Corridor Design Guidelines establish a series of key required conditions that will supplement current zoning regulations. Any development zoned commercially within this community mixed use center must comply with new key required conditions to achieve high quality site design, architectural features, landscape and pedestrian amenities which are aimed at strengthening compatibility with surrounding development (see Design Guidelines, Exhibit 8). In addition, should residential zoning occur to accommodate "cluster" type housing, the design of such a project should closely conform to the concepts contained in the Route 360 Corridor Design Guidelines.

Key to the economic feasibility and long term value of this new community focal point northeast of the Hicks Road/Route 360 intersection are the mixture, densities and arrangement of land uses. Its success, like that of the entire Corridor, will be measured by the vitality it draws from multiple generations.

IMPLEMENTATION CATALOG

The community's vision about important aspects of its desired future formed the basis for the ideas and concepts described below that can be used to implement the Route 360 Corridor Plan. Critical to the long term vitality of the Corridor are implementing marketing activities and design enhancements.

MARKETING APPROACHES

Economic growth is essential to the vitality of every community, influencing decisions residents and business owners make about where to invest.

A major element of this planning process is to understand the overall economic market potential of the Route 360 Corridor between Chippenham Parkway and Courthouse Road. The purpose of the section is to provide ideas and concepts that can be implemented to achieve the market potential of the Route 360 study area consistent with the Plan's goals.

The implementation approaches presented below are based on detailed information presented separately in the *Route 360 Market Trends Study* and the *Market Strategies Report* prepared for the County by The Chesapeake Group. In formulating these ideas, the firm's expertise with similar corridors was matched with input from area business and residential interests and County staff.

Background

Business development that emerged several decades ago in a logical progression west of the City of Richmond appears to have "bypassed" available infill sites in favor of locations where growth activity has been more intense (west of Courthouse Road and north along Route 60).

Within this context, the detailed market analysis defined activity that is or will be marketable along the Route 360 Corridor in the foreseeable future. Important to the potential marketing approaches presented later are the following major findings from this analysis:

- Future retail and service growth is most likely to be composed of non-regional scale activities that serve residents of the market area, and value oriented retail businesses. Demand will likely be sufficient to support several commercial developments in the future as well as space for professional offices and office-service tenants.

- Competition for market area dollars is likely to increase in the future. Although much growth is anticipated in the market area, the share of the market (market penetration) for commercial activity that is likely to be captured within this study area will be lower than the proportion of activity currently captured from the larger market area.

The role played by the County's Department of Economic Development in promoting small business development should not be overlooked. Currently, the Department has a staff person whose duties include recruitment, retention and promotion of small businesses, for example conducting site selection searches, providing business liaison with public agencies and contacts with financing organizations.

Possible Approaches for Reaching Market Potential

The approaches presented below summarize strategic activities that can be undertaken to strengthen market potential while maintaining fiscal prudence with public funds. They reflect the general conclusions of the Corridor market analysis as well as the aspirations of community business and residential interests. These activities fall within broad categories including: establishing market niche, providing incentives, and building public/private partnerships.

Establishing Market Niche

As noted previously, the retail and service businesses that will be attracted to the area are likely to be neighborhood and community-scale in character with demand estimated to support several such commercial and office centers over the next twenty years.

In order to support future household demand, maintain current market share, minimize traffic congestion, achieve a distinctive development quality while allowing a reasonable return on investment, the following considerations should be factored into future business activity decisions:

- Clustering of related uses at key intersection locations will be essential to create **critical mass** for long-term economic viability.
- The northeast portion of the Hicks Road/Route 360 intersection appears to be the most **advantageous location** for centralizing significant new community-scale commercial development.

- A new community focus will help to increase Corridor activity and assist **image building** that could result in increased investment and **stability** in the vicinity of Chippenham Parkway and Turner Road.
- An emphasis on small business development, composed of **small chains and independent operations** (as opposed to large regional and national chains), will be more likely to result in distinctive new shopping environments.
- Unique development character, as reflected in the recommended *Design Guidelines* (described later), will require **creativity** in designing sites and buildings that incorporate special natural amenities, architectural features compatible with surrounding development, valuable pedestrian amenities and sensitive landscaping. In achieving such enhancements, financing and leasing will be issues that must also be addressed creatively.
- **Physical improvements** to enhance streetscape views in existing commercial areas can help strengthen business image and function and stimulate additional business activity.
- coordinating the establishment of **themed events** to be sponsored by non-profit or business groups for the purpose of bringing people to specific locations being promoted. Such events should be self-sufficient, and include activities for young people. Coordination will be required with permits, scheduling, etc. By reinforcing public familiarity with the area, these events can impact market viability in both the short and longer term.
- establishing a **community newspaper** or magazine to promote residential communities, quality of life and commercial activity. Such a publication, mailed four to six times per year to market area households, could be run by volunteers and funded through paid advertisements. Pricing could be structured to induce small businesses to advertise. After initial start-up, professional assistance could be acquired for certain tasks thus allowing local business and community volunteers to focus on editorial control.
- making a **long-term commitment** to support opportunities for high quality, non-traditional commercial activity and unique suburban character housing for seniors.
- initiating a program to recruit local independent business people and prospective tenants. An effective **solicitation process** would require preparation of recruitment materials (easily adapted for varying tenants), with initial contact by mail and follow-up by telephone.
- undertaking related **recruitment activities aimed at developers** having experience with similar non-traditional projects. Preparing special marketing materials and telemarketing will be required initially with follow-up in writing and also by telephone.

Providing Incentives

Since establishment of the identified market niche involves non-traditional commercial development that achieves unique character, incentives may be considered necessary to overcome any perceived obstacles and to create an equitable set of circumstances relative to strong market competition or potentially higher development costs. Additional incentives may also be necessary to further stimulate investment in the vicinity of Chippenham Parkway where commercial development is aging without significant recent reinvestment.

Basic incentive types that could be used in this Corridor to facilitate quality development and to preserve existing businesses involve: technical assistance, public infrastructure and small business financial assistance. Each is described in more detail below:

Technical Assistance

Actions to assist building image and marketing the Corridor could include:

Public Infrastructure

Developer incentives related to public infrastructure could include:

- coordinating **public improvement agreements** to help off-set private sector costs. Per adopted extension policies, the County Utilities Department can continue to play a role in working with property owners to explore alternative ways of structuring private sector funding. Where feasible, creation of special purpose assessment districts can provide "up-front"

funding for needed utility or road construction projects setting a future pay back date. Such arrangements could allow the developer to off-set some unusual costs associated with a project in this area making it more economically feasible.

- assessing market implications of public facilities **siting decisions**. Enhanced viability can result from additional public sector activity that attracts people and creates synergism within a commercial area.
- allowing **increased development density** at appropriate commercial sites in return for additional public amenities. This additional development can allow for an increased revenue flow, which pays for additional project enhancements that provide special public benefit.

Small Business Financial Assistance

Availability of small loans (\$5,000 or more) is essential to foster rehabilitation of existing structures and to support market niche development for new tenants. Actions to insure such financing could include:

- creating a **loan pool** where risk is shared among several financial institutions. Other options to establish such financing may be available through the County's Community Development Block Grant program or through establishment of a community development bank, with financing provided through various private sources, and/or potentially available federal matching sources.

Building Public/Private Partnerships

Critical to the success of any of these activities is the entity responsible for overseeing implementation. Also important are the relationships resulting from the Rt. 360 Corridor planning process between commercial, frontage property owners, and residential interests in the study area. Since each of these interests shares with the County a stake in the future of the Corridor, they should become partners in implementation as well as planning. The following actions could be undertaken:

- forming an **implementation committee**, from a cross section of community, business and County representatives, to further define and direct implementation activity, perhaps leading to the establishment of a permanent entity. For example, this group could coordinate a demonstration project to implement recommended landscape enhancements in the Chippenham/Turner Road area.

- seeking **technical assistance** for the Committee from the County's Economic Development Department.

DESIGN GUIDELINES

The *Design Guidelines* document, accompanying this Plan, provides a basis for understanding the detailed visual analysis conducted in the Corridor and presents approaches for maintaining its unique appeal in the future. This analysis identifies key elements of the landscape that should be preserved as development occurs, and also suggests appropriate visual enhancements. Opportunities are identified to maintain an overall sense of visual harmony and Corridor appeal while strengthening unique identifying characteristics within the Corridor's six district visual zones.

General design guidelines for enhancing the streetscape are presented to describe recommended unifying features such as architectural character, signage and lighting. Landscape design is addressed in greater detail.

Concept drawings for areas representing the different visual zones show a potential plan of development with a list of key required conditions. These conditions incorporate site layout and design considerations that will insure future development in the Corridor is sensitive to key visual resources and strengthens aesthetic character. Rather than mandating one specific plan of development, each concept drawing will instead serve as a basis from which to create a detailed development proposal that will achieve consistent high quality design objectives aimed at enhancing the area's visual image. Once adopted, these design guidelines will supplement current Zoning Ordinance requirements. Site plans will be reviewed to insure that these key required conditions are incorporated into detailed development proposals, unless previous conditions of zoning apply.

APPENDIX A

Summary of Projected Growth Trends Route 360 Market Area

| | 1990 | 2010 |
|-------------------|-----------|-----------|
| Households | 21,697 | 36,872 |
| Employment | 22,780 | 46,159 |
| Household Income | \$ 46,460 | \$ 74,218 |
| Developed Acreage | 18,165 | 26,351 |

Sources: Route 360 Market Trends Study and the Chesterfield County Planning Department , 1993

Range of Additional Business Space Needs Route 360 Study Area, 1990-2010

| | Square Feet | | Acres* | |
|------------------|------------------|------------------|------------|------------|
| | Low | High | Low | High |
| Retail | 741,000 | 936,000 | 93 | 117 |
| Office | 199,150 | 254,000 | 40 | 51 |
| Light Industrial | 70,000 | 331,000 | 7 | 33 |
| Total | 1,010,150 | 1,521,590 | 140 | 201 |

*Note: Assumes per acre development yield of:

8,000 sq. ft. for retail uses

5,000 sq. ft. for office uses

10,000 sq. ft. for light industrial uses

Source: Route 360 Market Trends Study, The Chesapeake Group, Inc., 1993

APPENDIX C

Land Use Comparisons for the Route 360 Study Area

| | Additional Acres Needed By 2010 | Additional Acres Recom- mended By Plan |
|-------------------|--|---|
| Residential | n/a | 327 |
| Office | 40-51 | see note 1 |
| Commercial | 93-117 | 113 |
| Light Industrial | 7-33 | see note 2 |
| Public Facilities | 0-4 | see note 3 |
| Total | 140-205 | 440 |

Notes:

- 1 Office uses, appropriate in Mixed Use Corridor Areas, are reported in residential acreage.
- 2 Recommended acreage for light industrial uses included in assigned commercial acreage.
- 3 Recommended acreage for public facilities uses included in assigned commercial acreage.

Sources: Route 360 Market Trends Study, The Chesapeake Group, Inc., 1993
Chesterfield County Planning Department, 1993

APPENDIX B

DETAILED ANALYSIS OF COUNTY UTILITIES SYSTEMS

The existing water and wastewater system was analyzed to determine the impacts of future build-out of the land use plan in the Route 360 Corridor between Courthouse Road and Chippenham Parkway. Map 9 identifies the location and size of the principal water and sewer lines currently serving the area. It also identifies possible service restrictions within the existing system as well as the location and approximate length of extensions required to serve some of the development sites. A more detailed description of these facilities follows.

Water System

Undeveloped sites on the north side of Route 360 can be served directly by a 24 inch distribution main along the north side of Route 360, or by smaller distribution lines located along other major roads. Similarly, many undeveloped sites along the south side of the Corridor can be served by existing lines along major roads. Additional facility needs are described below:

- Sites between Falling Creek and Lynview Drive and immediately east of Lynview Drive will require a line extension across Route 360 from the 24 inch main to insure that an adequate source for fire protection is available. This extension may prove expensive due to the cost of boring under Route 360.
- Sites along Walmsley Boulevard will require a line extension from either a 12 inch line at Winterbrooke Drive or at Newbys Bridge Road.
- The potential exists for lower water pressures in the vicinity of the Route 360, Hicks Road and Walmsley Boulevard intersection due to higher land elevation. A looping of the two sources identified above may benefit development sites along Walmsley Boulevard.
- Sites along Walmsley Boulevard west of Turner Road will require extension of an existing 12 inch line.
- Sites along the south side of Goodes Bridge Road will require extension of an existing 8

inch line. The potential exists for lower pressures on Goodes Road unless the 8 inch line is looped to another source.

Wastewater System

The Route 360 area is primarily served by sewer trunk lines along Horners Run, Falling Creek, Pocoshock Creek and Pocosham Creek. Many undeveloped sites on both the north and south sides of the Corridor have service immediately available, however, on-site collector line extensions will be required in accordance with specific site development plans.

Several significant collector line extensions will be required due to the distance of these sites from the nearest existing line. These are located:

- On the north side of Route 360, west of Ladino Lane and west of Pocoshock Boulevard; and
- On the south side of Route 360, at Fordham Road; east/west of Lynview Drive and east/west of Astor Road.

Extensions for these sites south of Route 360 will be more difficult due to the necessary routing of these extensions through the established residential subdivisions of Falling Creek Farms, Lyndale, and Longwood Acres. Sites between Route 360 and Lockhardt Road could be served by continuing the Astor Road extension across Route 360. This extension may prove expensive due to the cost of boring under Route 360.

At build-out, the potential exists for flows to exceed the available capacity of several existing collector lines:

- a 10 inch line south of the Bedford Subdivision,
- a 10 inch line along Lancers Boulevard, and
- a 15 inch sub-trunk between Goodes Bridge Road and Lancers Boulevard.

These lines will be monitored as development occurs in the area and upgrade improvements will be scheduled as necessary.

Funding Options

Current County policy requires that the cost of extensions of the public water and wastewater systems to serve new development be borne by

the developer. If several properties under different ownership will be crossed by an extension, property owners are encouraged to work together to jointly accomplish the project and share the cost. This has proven successful, resulting in several major extensions of the public systems.

Another approach is the creation by the County of an assessment district wherein all properties directly served by an extension must pay a proportionate share of the project cost, based on parcel acreage. The County funds the project initially and is reimbursed by the property owners.

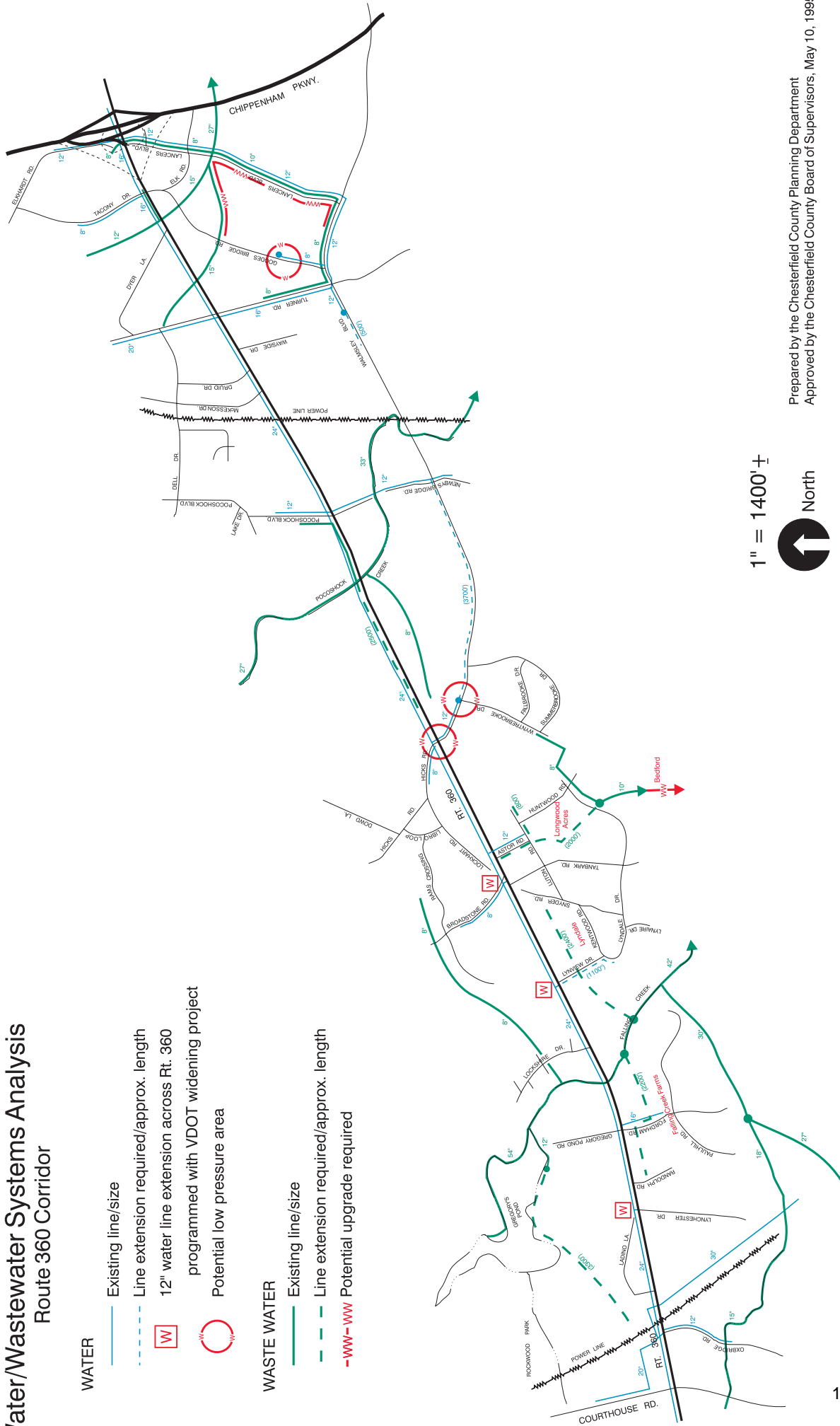
Each property owner's assessment can be paid in full once the extension is available for service connection, or the assessment can be paid out over ten (10) years. Originally, the assessment district approach was intended to be applied to residential areas that were previously developed with wells and/or septic systems. However, the concept has also been applied to commercial and industrial areas, both developed and primarily undeveloped.

Water/Wastewater Systems Analysis Route 360 Corridor

- WATER**

 - Existing line/size
 - Line extension required/approx. length
 - 12" water line extension across Rt. 360
 - programmed with VDOT widening project
 - Potential low pressure area
- WASTE WATER**

 - Existing line/size
 - Line extension required/approx. length
 - WW- WW Potential upgrade required



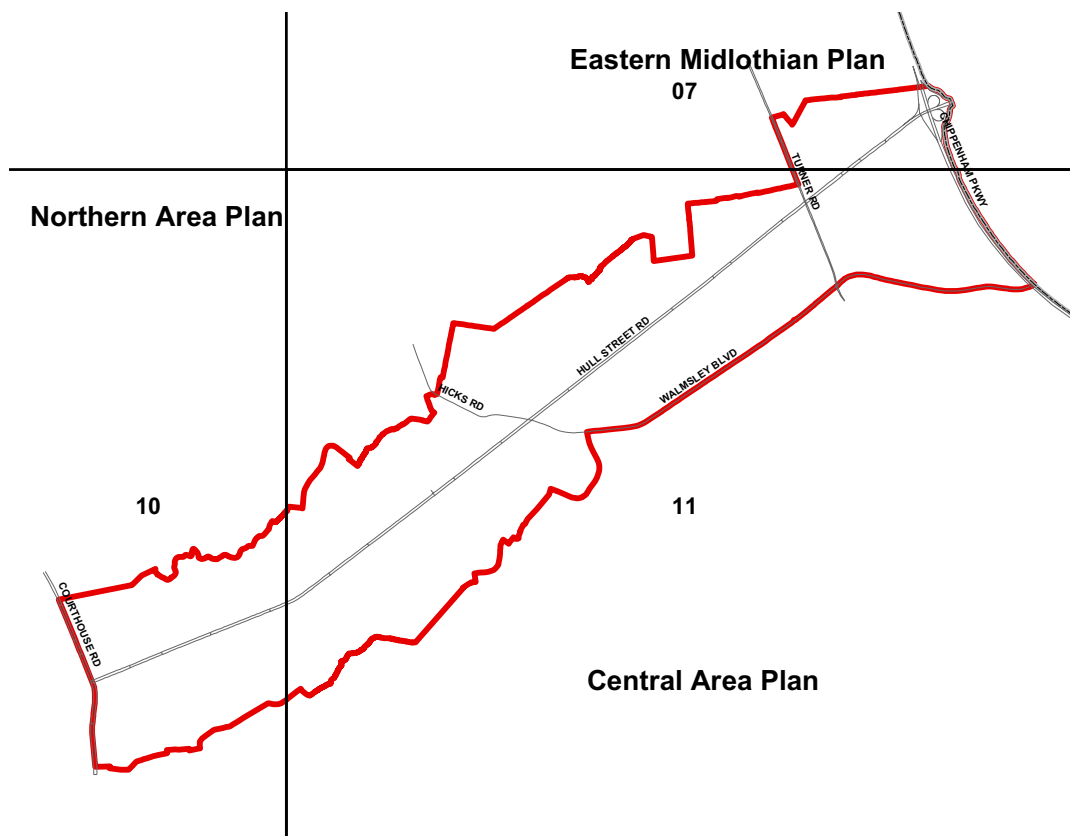
1" = 1400' ±



The Route 360 Corridor Plan

In 2006, Chesterfield County Planning Department consolidated all individual land use plan maps in the *Plan For Chesterfield* into the county's Geographic Information System (GIS). The land use plan for The Route 360 Corridor Plan is now published in two forms: 1) as part of a countywide land use plan map, and 2) on land use plan grid map numbers 07,10,11

The recommended land use category definitions for the land use plan and the notes associated with the plan follows this page.



Copies of the Plan For Chesterfield countywide land use plan map and each of its more detailed 46 grid maps are available through the following sources:

- On the *Chesterfield County Planning Department* CD. This CD is included with paper copies of *The Plan for Chesterfield*, and also available separately from the Chesterfield County Planning Department.
- On Internet at <http://www.chesterfield.gov/plan>.

Questions Concerning the Plan For Chesterfield and its related land use plans should be directed to the Chesterfield County Planning Department at 804/748-1050 or planning@chesterfield.gov.

CHART 3**LAND USE CATEGORIES**

The plan recommends the following land use categories as shown on the Land Use Plan map and illustrated in separate *Route 360 Corridor Design Guidelines*.

RESIDENTIAL: 4 units/acre or less.

MIXED USE CORRIDOR: A mixture of uses to include: residential developments incorporating high quality architectural features and site amenities and using "cluster" designs to maintain open space (up to 6 units/acre); corporate office uses (O-2 District) which could include office/warehouse uses; churches, public facilities and other uses with similar impacts. Office/warehouse uses may be developed adjacent to residential areas under certain circumstances, including but not necessarily limited to the following: such uses must be designed architecturally to be compatible with adjacent residences, with loading areas oriented away from residential uses. Convenience commercial uses (C-1 District) may be appropriate only when located internally to a residential or office park project, not along any road on the periphery of the project, and primarily for the convenience of those employed or residing in the project.

NEIGHBORHOOD MIXED USE: Neighborhood oriented development (C-2 District) including small shopping centers, and other commercial services and office uses.

COMMUNITY MIXED USE: Community-scale development (C-3 District) including shopping centers, other commercial and office uses, and integrated residential projects designed to include high quality architectural features and site amenities. Residential types shall not include multi-family or townhouse developments, but may include housing types such as "cluster" or zero lot line designs that maintain open space at densities up to 6 units/acre.

GENERAL COMMERCIAL/LIGHT INDUSTRIAL: Community-scale and general commercial uses (C-5 District) including motor vehicle oriented uses and light industrial uses.

The Route 360 Corridor Plan

Notes

NOTES:

Within all land use categories, zoning proposals will be analyzed to determine specific impacts of individual projects on existing and future development. It is not the intent of this Plan to propose, analyze or approve specific densities within each land use category.

The transportation impact and required road improvements for specific development proposals should be evaluated through the zoning and development review process.

Appropriate land use transitions should be provided between existing and future residential development and higher intensity uses within general commercial, community and neighborhood mixed use areas. Such transitions should include, but not necessarily be limited to, offices, office/warehouses, churches, public facilities, housing types such as “cluster” or zero lot line, or similar uses.

Office/warehouse uses may be developed adjacent to residential areas under certain circumstances, including but not necessarily limited to the following: such uses must be designed architecturally to be compatible with adjacent residences, with loading areas oriented away from residential uses. Other acceptable transitional design features could include topographical or other environmental features. Pedestrian access should be provided between all uses.

1. Community mixed use center surrounded by office and/or residential uses, designed to incorporate site layout and design concepts consistent with Design Guidelines (exhibit 6) and identified visual resources. The main access should be from Gregory's Pond Road. Architecturally compatible office-warehouses may be appropriate north of proposed collector road. On the east side of Gregory's Pond Road, approximately 5 to 7 acres of limited retail development (C-2 type) may be suitable adjacent to the proposed collector road. Continued residential use is appropriate in the Gregory's Pond Road area. However, if existing residential parcels are incorporated into a larger scale plan of development other uses as outlined herein may be appropriate in the future.
2. Appropriate location for small, village-type shopping center (up to 6 acres) primarily to serve adjacent neighborhoods. It should contain a mixture of small specialty retail and office uses (C-2 District), sited around approximately 1 acre of public/semi-public open space, and be consistent with site layout and design concepts contained in Design Guidelines (exhibit 7).
3. New pedestrian oriented, community mixed use center site appropriate for initial Corridor retail development and other complimentary uses such as those listed in the Community Mixed Use category (C-3 District), but not including multi-family or townhouse residential types. Development of individual parcels is appropriate if

consistent with site layout and design concepts contained in Design Guide-lines (exhibit 8).

4. Limited neighborhood-scale retail uses (C-2 District or lower) may be appropriate only if such development includes land use transitions and features to provide appropriate transition to adjacent neighborhoods and to achieve visual consistency with adjacent community mixed use center at northeast corner (see Design Guidelines, exhibit 8).
5. Existing residences could be converted for interim uses (as indicated). Longer term, however, general commercial or light industrial development is appropriate if parcels are part of a larger scale plan of development that is oriented east and aggregates land fronting Goode's Bridge Road. New development should provide transition to adjacent residences.



ROUTE 360 CORRIDOR PLAN

Approved by the Chesterfield County
Board of Supervisors May 10, 1995

REFER TO
EASTERN MIDLOTHIAN PLAN
See Plan for Legend

REFER TO
NORTHERN AREA PLAN
See Plan for Legend

CITY OF
RICHMOND

 Plan Boundary
 Grid

 Residential: 4 units/acre or less

 Mixed Use Corridor

Commercial

 Neighborhood Mixed Use

 Community Mixed Use

 General Commercial

See Plan Text For Notes

REFER TO
CENTRAL AREA PLAN
See Plan for Legend



0 0.5 1 Miles

Prepared by the Chesterfield County
Planning Department
October 2006